

CLAIM LISTING

1. (Currently Amended) A method for protecting text within a page to be displayed by a computer, the method comprising:

- identifying a designated portion of original text contained within ~~[[a]]~~ the page,
~~to be protected~~;
- modifying the page, comprising:
 - encrypting the designated portion of original text to form a portion of encrypted text; and
 - replacing the designated portion of original text within the page with the portion of encrypted text;
- rendering the page into a graphics device, comprising:
 - decrypting the portion of encrypted text within a patched operating system function to produce decrypted text;
 - dynamically generating a layout for display of the page based on spatial characteristics of the decrypted text ~~instead of spatial characteristics of the encrypted text, to ensure that the display of the page corresponds to the display of a page containing the designated portion of original text, wherein the spatial characteristics include wherein a layout for display of a page defines spatial characteristics of, the characteristics including at least one of (a) positions of characters, (b) heights of characters, (c) widths of characters, (d) widths of words, (e) shapes of characters, (f) spacings between characters, (g) spacings between words, (h) spacings between lines, (i) numbers of characters per line, (j) numbers of words per line, (k) page margins, and (l) paragraph indentations, and wherein said dynamically generating comprises decrypting encrypted text strings within a patched operating system function that returns spatial characteristics of text; and~~
 - ~~decrypting the portion of encrypted text prior to displaying the page;~~
- and
- converting the page text into output data for a graphics device output;
- and
- displaying ~~at least a portion of data from~~ the output data ~~the graphics device~~.

2. (Original) The method of claim 1 wherein the page is a web page.
3. (Original) The method of claim 2 wherein the web page is an HTML page.
4. (Original) The method of claim 2 wherein the web page is an XML page.
5. (Original) The method of claim 1 wherein the page is part of a document produced by a software application.
6. (Original) The method of claim 1 wherein the graphics device is a memory device.
7. (Original) The method of claim 1 wherein the graphics device is a screen device.
8. (Original) The method of claim 1 wherein the graphics device is a graphics port.
9. (Previously Presented) The method of claim 1 wherein said encrypting is based on encoding of characters.
10. (Previously Presented) The method of claim 1 wherein said encrypting is based on encoding of words.
11. (Previously Presented) The method of claim 1 wherein said encrypting comprises adding leading and trailing characters to flag encrypted text.
12. (Previously Presented) The method of claim 1 wherein said encrypting comprises padding encrypted text so that identical words have distinct encrypted representations.
13. (Canceled)

14. (Currently Amended) The method of claim 1 wherein the graphics output data is raster output data.

15. (Currently Amended) The method of claim 1 wherein said identifying, ~~said encrypting~~ and ~~said replacing~~ modifying are performed by a server computer, and wherein ~~said controlling~~, said rendering and said displaying are performed by a client computer connected to the server computer over a network.

16. (Previously Presented) The method of claim 1 wherein said decrypting the portion of encrypted text occurs within a patched operating system function for outputting content.

17. (Previously Presented) The method of claim 16 wherein the operating system function is a TextOut function.

18. (Previously Presented) The method of claim 16 wherein the operating system function is a DrawText function.

19 - 24. (Canceled)

25. (Currently Amended) The method of claim 1 wherein the spatial characteristics are obtained using ~~operating-system-function~~ is a GetTextExtent function.

26. (Currently Amended) A system for protecting text within a page to be displayed by a computer, the system comprising:

a parser identifying a designated portion of original text contained within the ~~[[a]] page, to be protected;~~

an encoder encrypting the designated portion of original text to ~~form~~ produce a portion of encrypted text;

an editor replacing the designated portion of original text with the portion of encrypted text, ~~within the page;~~

a graphics device;
a page renderer rendering the page into said graphics device, the page renderer comprising:
a decoder decrypting the portion of encrypted text within a patched operating system function to produce decrypted text;
a page formatter controlling a layout for display of the page, by dynamically generating a page layout based on spatial characteristics of the decrypted text ~~instead of spatial characteristics of the encrypted text, to ensure that the display of the page corresponds to the display of a page containing the designated portion of original text,~~ the page formatter comprising a layout generator deriving wherein a layout for display of a page defines spatial characteristics ~~[[of]] for rendering the decrypted text,~~ the spatial characteristics including at least one of (a) positions of characters, (b) heights of characters, (c) widths of characters, (d) widths of words, (e) shapes of characters, (f) spacings between characters, (g) spacings between words, (h) spacings between lines, (i) numbers of characters per line, (j) numbers of words per line, (k) page margins, and (l) paragraph indentations, ~~and wherein the page formatter comprises;~~ and
~~a string decoder for decrypting encrypted text strings, said string decoder operating within a patched operating system function that returns spatial characteristics of text;~~
~~a text decoder decrypting the portion of encrypted text prior to display of page; and~~
an output processor for converting the page text into output data for a graphics device output; and
a display device displaying at least a portion of the output data from said graphics device.

27. (Original) The system of claim 26 wherein the page is a web page.

28. (Original) The system of claim 27 wherein the web page is an HTML page.

29. (Original) The system of claim 27 wherein the web page is an XML page.

30. (Original) The system of claim 26 wherein the page is part of a document produced by a software application.

31. (Original) The system of claim 26 wherein said graphics device is a memory device.

32. (Original) The system of claim 26 wherein said graphics device is a screen device.

33. (Original) The system of claim 26 wherein said graphics device is a graphics port.

34. (Previously Presented) The system of claim 26 wherein said encoder performs encoding of characters.

35. (Previously Presented) The system of claim 26 wherein said encoder performs encoding of words.

36. (Previously Presented) The system of claim 26 wherein said encoder adds leading and trailing characters to flag encrypted text.

37. (Previously Presented) The system of claim 26 wherein said encoder pads encrypted text so that identical words have distinct encrypted representations.

38. (Canceled)

39. (Currently Amended) The system of claim 26 wherein the graphics output data is raster output data.

40. (Original) The system of claim 26 wherein said parser, said encoder and said editor reside on a server computer, wherein said graphics device and said page renderer reside on a client computer, and wherein said display device is connected

to the client computer, the system further comprising network connectors connecting the client computer to the server computer.

41. (Canceled)

42. (Currently Amended) The system of claim [[41]] 26 wherein the patched operating system function is a TextOut function.

43. (Currently Amended) The system of claim [[41]] 26 wherein the patched operating system function is a Macintosh DrawText function.

44 - 49. (Canceled)

50. (Currently Amended) The system of claim 26 wherein at least one of the spatial characteristics is computed by the operating system function is a GetTextExtent function.

51. (Currently Amended) A method for protecting text contained within a page to be displayed by a computer, wherein the page contains a portion of encrypted text, the method comprising:

~~accessing a page containing a portion of encrypted text;~~

~~rendering the page into a graphics device, comprising:~~

~~decrypting the portion of encrypted text within a patched operating system function to produce decrypted text;~~

~~determining spatial characteristics for the decrypted text and dynamically generating a layout for the page based on the spatial characteristics, wherein the ~~intervening with at least one function that controls layouts for display of the page, comprising dynamically generating a layout for display of the page based on spatial characteristics of decrypted text instead of spatial characteristics of the encrypted text, to ensure that the display of the page corresponds to the display of a page containing decrypted text, wherein a layout for display of a page defines spatial characteristics of text, the characteristics including~~ include at least one of (a) positions of characters, (b) heights of characters, (c) widths of characters, (d) widths~~

of words, (e) shapes of characters, (f) spacings between characters, (g) spacings between words, (h) spacings between lines, (i) numbers of characters per line, (j) numbers of words per line, (k) page margins, and (l) paragraph indentations; and decrypting the portion of encrypted text prior to displaying the page; and converting the page into output data for a graphics device content into graphics output; and
displaying at least a portion of the output data ~~from the graphics device.~~

52. (Original) The method of claim 51 wherein the page is a web page.

53. (Original) The method of claim 52 wherein the web page is an HTML page.

54. (Original) The method of claim 52 wherein the web page is an XML page.

55. (Original) The method of claim 51 wherein the page is part of a document produced by a software application.

56. (Original) The method of claim 51 wherein the graphics device is a memory device.

57. (Original) The method of claim 51 wherein the graphics device is a screen device.

58. (Original) The method of claim 51 wherein the graphics device is a graphics port.

59. (Canceled)

60. (Currently Amended) The method of claim 51 wherein the output data ~~graphics output~~ is raster output data.

61. (Canceled)

62. (Currently Amended) The method of claim [[61]] 51 wherein the patched operating system function is a TextOut function.

63. (Currently Amended) The method of claim [[61]] 51 wherein the patched operating system function is a DrawText function.

64 - 68. (Canceled)

69. (Currently Amended) The method of claim [[68]] 51 wherein the patched operating system function is a function adapted to determine said decrypting encrypted text strings occurs within a patched operating system function for determining widths of character strings.

70. (Currently Amended) The method of claim 69 wherein the patched operating system function is a GetTextExtent function.

71. (Currently Amended) The method of claim 51 further comprising receiving the page ~~having the portion of encrypted text~~ from a server computer.

72. (Currently Amended) A system for protecting text contained within a page to be displayed by a computer, the page containing a portion of encrypted text, the system comprising:

computer hardware storing [[a]] the page containing a portion of encrypted text;

a graphics device;

a page renderer rendering the page into said graphics device, the page renderer comprising:

a decoder decrypting the portion of encrypted text within a patched operating system function to produce decrypted text;

a page formatter controlling a layout for display of the page, by dynamically generating a layout for display of the page based on spatial

characteristics of the decrypted text ~~instead of spatial characteristics of encrypted text, to ensure that the display of the page corresponds to the display of a page containing decrypted text, wherein a layout for display of a page defines spatial characteristics of text~~, the spatial characteristics including at least one of (a) positions of characters, (b) heights of characters, (c) widths of characters, (d) widths of words, (e) shapes of characters, (f) spacings between characters, (g) spacings between words, (h) spacings between lines, (i) numbers of characters per line, (j) numbers of words per line, (k) page margins, and (l) paragraph indentations; and
~~a text decoder decrypting the portion of encrypted text prior to display of page; and~~
an output processor converting the page text into output data for a graphics device output; and
a display device displaying at least a portion of the output data from-said graphics device.

73. (Original) The system of claim 72 wherein the page is a web page.

74. (Original) The system of claim 73 wherein the web page is an HTML page.

75. (Original) The system of claim 73 wherein the web page is an XML page.

76. (Original) The system of claim 72 wherein the page is part of a document produced by a software application.

77. (Original) The system of claim 72 wherein said graphics device is a memory device.

78. (Original) The system of claim 72 wherein said graphics device is a screen device.

79. (Original) The system of claim 72 wherein said graphics device is a graphics port.

80. (Canceled)

81. (Currently Amended) The system of claim 72 wherein the output data graphics output is raster output data.

82. (Canceled)

83. (Currently Amended) The system of claim [[82]] 72 wherein the patched operating system function is a TextOut function.

84. (Currently Amended) The system of claim [[82]] 72 wherein the patched operating system function is a DrawText function.

85 - 87. (Canceled)

88. (Previously Presented) The system of claim 72 wherein said page formatter comprises a string analyzer calculating widths of character strings.

89. (Previously Presented) The system of claim 88 wherein said page formatter comprises a string decoder decrypting encrypted text strings.

90. (Original) The system of claim 89 wherein said string decoder operates within a patched operating system function for determining widths of character strings.

91. (Previously Presented) The system of claim 90 wherein the operating system function is a GetTextExtent function.

92. (Previously Presented) The system of claim 72 further comprising:
a network connector; and

a receiver receiving the page having the portion of encrypted text from a server computer via said network connector.

93 - 114. (Canceled)

115. (Currently Amended) A method for protecting text within a page to be displayed by a computer, the page containing a portion of encrypted text, the method comprising:

dynamically formatting ~~[[a]]~~ the page by decrypting the portion of encrypted text within a patched operating system function to produce decrypted text, and thereafter generating a layout for the page based on spatial characteristics of the decrypted text, the spatial characteristics ~~containing a first portion of text to determine a layout for display of the page, comprising intervening with at least one function that controls layouts for display of the page, to base the layout for display of the page on spatial characteristics of a second portion of text instead of spatial characteristics of a first portion of text, to ensure that the display of the page corresponds to the display of a page containing the second portion of text, wherein a layout for display of a page defines spatial characteristics of text, the characteristics including at least one of (a) positions of characters, (b) heights of characters, (c) widths of characters, (d) widths of words, (e) shapes of characters, (f) spacings between characters, (g) spacings between words, (h) spacings between lines, (i) numbers of characters per line, (j) numbers of words per line, (k) page margins, and (l) paragraph indentations; and~~

~~rendering the page into a graphics device according to the page layout into a graphics device, said rendering~~ comprising:

~~replacing the portion of encrypted text within the page with the decrypted text~~ first portion of text with the second portion of text;

~~converting the page second portion of text to a~~ into ~~graphics output data for a graphics device; and~~

~~writing the graphics output~~ data ~~into the graphics device.~~

116. (Currently Amended) The method of claim 115 wherein the portion of encrypted text includes encrypted words of text having the same respective widths as corresponding words of text included in the portion of decrypted text ~~first portion of text has the same word widths as does the second portion of text.~~

117. (Currently Amended) The method of claim 115 wherein the graphics output data is raster output data.

118. (Currently Amended) The method of claim 115 wherein said replacing the portion of encrypted first portion of text with the second portion of portion of decrypted text occurs within a patched operating system function for converting text into graphics output.

119. (Currently Amended) The method of claim 118 wherein the patched operating system function is a TextOut function.

120. (Currently Amended) The method of claim 118 wherein the patched operating system function is a DrawText function.

121. (Currently Amended) The method of claim 115 wherein said formatting comprises:

replacing encrypted first text strings with decrypted second text strings; and
calculating widths of the decrypted second text strings based on selected font types and font sizes.

122. (Currently Amended) The method of claim 121 wherein said replacing encrypted first text strings with decrypted second text strings occurs within a patched operating system function for determining widths of character strings.

123. (Currently Amended) The method of claim 122 wherein the patched operating system function is a GetTextExtent function.

124. (Currently Amended) A system for protecting text within a page to be displayed by a computer, the page including a portion of encrypted text, the system comprising:

a page formatter dynamically formatting [[a]] the page by decrypting the portion of encrypted text within a patched operating system function to produce

decrypted text, and thereafter generating a layout for the page based on spatial characteristics of the decrypted text, the spatial characteristics containing a first portion of text to determine a layout for display of the page, but based on spatial characteristics of a second portion of text instead of spatial characteristics of a first portion of text, to ensure that the display of the page corresponds to the display of a page containing the second portion of text, wherein a layout for display of a page defines spatial characteristics of text, the characteristics including at least one of (a) positions of characters, (b) heights of characters, (c) widths of characters, (d) widths of words, (e) shapes of characters, (f) spacings between characters, (g) spacings between words, (h) spacings between lines, (i) numbers of characters per line, (j) numbers of words per line, (k) page margins, and (l) paragraph indentations; and
a page renderer rendering the page into a graphics device according to the page layout ~~into a graphics device, the page renderer~~ comprising:

a text processor replacing the first portion of encrypted text with [[a]] second portion of the decrypted text; and

a text convertor converting the ~~second portion of page including the decrypted text~~ [[to]] into a graphics output data for the graphics device and writing the graphics output into the graphics device.

125. (Currently Amended) The system of claim 124 wherein the portion of encrypted text includes encrypted words of text having the same respective widths as corresponding words of text included in the decrypted text ~~first portion of text has the same word widths as does the second portion of text.~~

126. (Currently Amended) The system of claim 124 wherein the graphics output data is raster output data.

127. (Currently Amended) The system of claim 124 wherein said text processor operates within a patched operating system function for converting text into graphics output data for the graphics device.

128. (Currently Amended) The system of claim 127 wherein the patched operating system function is a TextOut function.

129. (Currently Amended) The system of claim 127 wherein the patched operating system function is a DrawText function.

130. (Currently Amended) The system of claim 124 wherein said formatter comprises:

a string processor replacing encrypted first text strings with decrypted second text strings; and

a string analyzer calculating widths of the decrypted second text strings based on selected font types and font sizes.

131. (Original) The system of claim 130 wherein said string processor operates within a patched operating system function for determining widths of character strings.

132. (Currently Amended) The system of claim 131 wherein the patched operating system function is a GetTextExtent function.

133 - 140. (Canceled)

141. (Currently Amended) A method for protecting text within a page to be displayed by a computer, wherein the page includes a plurality of encrypted text strings, the method comprising:

decrypting the plurality of encrypted text strings within a patched operating system function to produce a plurality of decrypted text strings;

replacing the plurality of encrypted text strings within the page with the plurality of decrypted text strings;

determining spatial characteristics of the decrypted text strings within the patched operating system function; and

deriving a layout for the page based on the spatial characteristics of the decrypted text strings

~~first text strings with second text strings within a patched operating system function that dynamically generates a layout for display of a page; and~~

~~replacing a first portion of text with a second portion of text when rendering the page according to the layout for display by a graphics device.~~

142. (Currently Amended) A system for protecting text within a page to be displayed by a computer, the page including a plurality of encrypted text strings, the system comprising:

a decoder adapted to decrypt the plurality of encrypted text strings within a patched operating system function to produce a plurality of decrypted text strings;

an editor adapted to replace the encrypted text strings with the decrypted text strings;

a page formatter adapted to dynamically generate a layout for displaying the page by determining spatial characteristics of the decrypted text strings and generating the layout based on the spatial characteristics.

~~a layout generator deriving requisite spatial characteristics for rendering text strings, to ensure that the spatial layout of first text strings corresponds to the spatial layout of second text strings, comprising a string processor replacing the first text strings with the second text strings, said string processor operating within a patched operating system function that dynamically generates a spatial layout for display of a page text; and~~

~~a text processor replacing a the first portion of text strings with a the second portion of text strings when rendering the page text according to the layout derived spatial characteristics, said text processor operating within a patched operating system function used for displaying text on for display by a graphics device.~~

143 - 170. (Canceled)

171. (Currently Amended) A computer-readable storage medium storing program code for causing a device to perform the steps of:

identifying a designated portion of original text contained within a page to be displayed by a computer, to be protected;

modifying the page, comprising:

encrypting the designated portion of original text to form a portion of encrypted text; and

replacing the designated portion of original text within the page with the portion of encrypted text;

rendering the page into a graphics device, comprising:

decrypting the portion of encrypted text within a patched operating system function to produce decrypted text;

dynamically generating a layout for display of the page based on spatial characteristics of the decrypted text ~~instead of spatial characteristics of the encrypted text, to ensure that the display of the page corresponds to the display of a page containing the designated portion of original text, wherein a layout for display of a page defines spatial characteristics of text, wherein the spatial characteristics include the characteristics including~~ at least one of (a) positions of characters, (b) heights of characters, (c) widths of characters, (d) widths of words, (e) shapes of characters, (f) spacings between characters, (g) spacings between words, (h) spacings between lines, (i) numbers of characters per line, (j) numbers of words per line, (k) page margins, and (l) paragraph indentations, ~~and wherein the dynamically generating comprises decrypting encrypted text strings within a patched operating system function that returns spatial characteristics of text;~~

~~decrypting the portion of encrypted text prior to displaying the page;~~

and

converting the page text into output data for a graphics device output;

and

displaying ~~at least a portion of data from~~ the output data ~~the graphics device.~~

172. (Currently Amended) A computer-readable storage medium storing program code for causing a device to perform the steps of:

accessing a page containing a portion of encrypted text;

rendering the page into a graphics device, comprising:

decrypting the portion of encrypted text within a patched operating system function to produce decrypted text;

determining spatial characteristics for the decrypted text and dynamically generating a layout for the page based on the spatial characteristics, wherein the ~~intervening with at least one function that controls layouts for display of the page, comprising dynamically generating a layout for display of the page based~~

~~on spatial characteristics of decrypted text instead of spatial characteristics of the encrypted text, to ensure that the display of the page corresponds to the display of a page containing decrypted text, wherein a layout for display of a page defines spatial characteristics of text, the characteristics including~~ include at least one of (a) positions of characters, (b) heights of characters, (c) widths of characters, (d) widths of words, (e) shapes of characters, (f) spacings between characters, (g) spacings between words, (h) spacings between lines, (i) numbers of characters per line, (j) numbers of words per line, (k) page margins, and (l) paragraph indentations; and
~~decrypting the portion of encrypted text prior to displaying the page; and~~
converting the page into output data for a graphics device content into
~~graphics output; and~~
displaying at least a portion of the output data from the graphics device.

173. (Currently Amended) A computer-readable storage medium storing program code for causing a device to perform the steps of:

dynamically formatting a page containing a portion of encrypted text by
decrypting the encrypted text within a patched operating system function to produce
decrypted text, and thereafter generating a layout for the page based on spatial
characteristics of the decrypted text, the spatial characteristics containing a first
~~portion of text to determine a page layout for display of the page, comprising~~
~~intervening with at least one function that controls layouts for display of the page, to~~
~~base the layout for display of the page on spatial characteristics of a second portion~~
~~of text instead of spatial characteristics of a first portion of text, to ensure that the~~
~~display of the page corresponds to the display of a page containing the second~~
~~portion of text, wherein a layout for display of a page defines spatial characteristics~~
~~of text, the characteristics including at least one of (a) positions of characters, (b)~~
~~heights of characters, (c) widths of characters, (d) widths of words, (e) shapes of~~
~~characters, (f) spacings between characters, (g) spacings between words, (h)~~
~~spacings between lines, (i) numbers of characters per line, (j) numbers of words per~~
~~line, (k) page margins, and (l) paragraph indentations; and~~
rendering the page into a graphics device according to the page layout into a
graphics device, said rendering comprising:

replacing the portion of encrypted text within the page with the decrypted text ~~first portion of text with the second portion of text;~~
converting the page second portion of text to a into graphics output ~~data for a graphics device;~~ and
writing the graphics output data into the graphics device.

174. (Currently Amended) A computer-readable storage medium storing program code for causing a device to perform a method for protecting text within a page to be displayed by a computer, wherein the page includes a plurality of encrypted text strings, the method comprising: the steps of:

decrypting the plurality of encrypted text strings within a patched operating system function to produce a plurality of decrypted text strings;

replacing the plurality of encrypted text strings within the page with the plurality of decrypted text strings;

determining spatial characteristics of the decrypted text strings within the patched operating system function; and

deriving a layout for the page based on the spatial characteristics of the decrypted text strings

~~first text strings with second text strings within a patched operating system function that dynamically generates a layout for display of a page; and~~

~~replacing a first portion of text with a second portion of text when rendering the page according to the layout for display by a graphics device.~~

175 - 187. (Canceled)